

Appln. No.: 09/677,901
Amendment Dated February 20, 2004
Reply to Office Action of November 20, 2003

MATI-195US

Remarks/Arguments:

Applicants note that the initialed form 1449 from the Information Disclosure Statement filed July 22, 2003 was not received with the above-identified Office Action. Applicants request that the Examiner send the initialed form 1449 prior to or with the next communication.

Claims 1-8 and 11-16 are pending in the above-identified application. Claims 9, 10, 17 and 18 have been withdrawn from consideration.

Claims 1 and 11 were rejected under 35 U.S.C. § 102(e) as being anticipated by Chen et al. This ground for rejection is overcome by amending claims 1 and 11 to include the limitations of claim 3. In particular, Chen et al. do not disclose or suggest,

decoding the first encoded video signal to obtain a stream of DCT coefficient blocks in the first format wherein at least some of the DCT coefficient blocks include run-length coded coefficient values; [and]

reformatting the DCT coefficient blocks obtained from the first encoded video signal into DCT coefficient blocks for the second format without run-length decoding the run-length coded values

as set forth in claim 1, claim 11 includes a similar recitation. Basis for these amendments may be found in claim 3 and in the specification at page 16, lines 2-17. No new matter is added by these amendments.

Chen et al. concerns a transcoder that transcodes DV video signals into MPEG video signals. It does this using matrix operations, as described at column 7, line 30 through column 11, line 44. Because these matrix operations require that the coefficients for the blocks be arranged in 8x8 matrixes, the Chen et al. transcoder can not meet the limitations of amended claims 1 and 11 because it must run-length decode any run-length encoded values. If it did not, then coefficient positions following the run-length coded coefficients in the matrixes would be vacant and the matrix operations would not be valid.

Furthermore, Chen et al., at column 7, lines 13-16 indicate that their method, as disclosed, does not use run-length encoded values but that "run length decoding or encoding ... can be incorporated into DV decoder 218 and MPEG encoder 220." Thus, Chen et al. explicitly

Appln. No.: 09/677,901
Amendment Dated February 20, 2004
Reply to Office Action of November 20, 2003

MATI-195US

state that, if run-length coded coefficient values are used, these values would need to be decoded as a part of the transcoding operation.

Claim 3 was rejected under 35 U.S.C. § 103(a) as being obvious in view of Chen et al. and Potu. Potu concerns a decoder and not a transcoder. It was cited in the Official Action merely to show that run-length decoders were known. It does not, however, describe any method by which "DCT coefficient blocks obtained from the first encoded video signal" may be reformatted "into DCT coefficient blocks for the second format without run-length decoding the run-length coded values," as required by amended claims 1 and 11. Thus, Potu does not provide the material that is missing from Chen et al. Accordingly, claims 1 and 11 are not subject to rejection under 35 U.S.C. § 102(e) in view of Chen et al. and are not subject to rejection under 35 U.S.C. § 103(a) in view of Chen et al. and Potu.

Claims 2 and 3 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Chen et al. and Potu. This ground for rejection is overcome by the amendment of claim 1 and the cancellation of claim 3. As set forth above, claim 1, from which claim 2 depends, is not subject to rejection under 35 U.S.C. § 103(a) in view of Chen et al. and Potu. Accordingly, claim 2 is also not subject to rejection under 35 U.S.C. § 103(a) in view of Chen et al. and Potu.

Claims 4 and 5 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Chen et al., Potu and Linzer et al. Chen et al. and Potu are described above. Linzer et al. concerns a transcoder that decodes the encoded video signal according to one standard to obtain decoded video frames and then re-encodes the video signal according to the other standard. (See column 2, lines 50-52 and 63-65). Thus, Linzer et al. can not disclose or suggest any method by which "DCT coefficient blocks obtained from the first encoded video signal" may be reformatted "into DCT coefficient blocks for the second format without run-length decoding the run-length coded values," as required by amended claim 1, from which claims 4 and 5 depend. Because claim 1 is not subject to rejection under 35 U.S.C. § 103(a) in view of Chen et al. Potu, and Linzer et al., claims 4 and 5 are also not subject to rejection under 35 U.S.C. § 103(a) in view of Chen et al. Potu and Linzer et al.

Appln. No.: 09/677,901
Amendment Dated February 20, 2004
Reply to Office Action of November 20, 2003

MATI-195US

Claims 14, 15 and 16 were rejected under 35 U.S.C. § 103(a) as being obvious in view of Chen et al. and Tsuobi et al. This ground for rejection is respectfully traversed. In particular, neither Chen et al. nor Tsuobi et al. disclose or suggest,

reformatting the DCT coefficient blocks obtained from the first encoded video signal into DCT coefficient blocks for the MPEG format including the step of, responsive to a data rate control signal for the second signal, selectively setting to zero one of a) the coefficients in the plurality of lists of overflow macroblock coefficients and b) coefficients in the list of overflow segment coefficients to control a data rate of the second signal

As required by claim 14, Chen discloses a DV to MPEG transcoder but does not disclose any method of handling overflow macroblock coefficients. Tsuobi et al. disclose an encoder that generates DV encoded video signals including overflow coefficients (see Figs. 16A and 16B but does not disclose or suggest setting these coefficients to zero responsive to a data rate control signal. In the Office Action, the Examiner asserts that "It is well known in the art to monitor the rate of an output stream to adjust the encoding process to maintain a certain bit rate. It would be obvious for one of ordinary skill in the art at the time of the invention to combine the transcoder of Chen with the fixed block length encoding/decoding method of Tsuobi et al. in order to provide a transcoder that would take a DV stream from a medium that stores information in fixed blocks." Applicants do not understand how this statement relates to the invention as defined by claim 14. The Examiner does not provide any statement as to why it would be obvious for one of ordinary skill in the art to zero any coefficient, much less an overflow coefficient from a fixed-length block encoding method such as DV, to produce an encoded video signal for a variable-length block size encoding method such as MPEG.

Because, neither Chen et al., Tsuobi et al. nor their combination discloses or suggests any method which zeros one or more overflow coefficients responsive to a data rate control signal, as required by claim 14, claim 14 is not subject to rejection under 35 U.S.C. § 103(a) in view of Chen et al. and Tsuobi et al.

Applicants gratefully acknowledge the statement in the Office Action that claims 7, 8, 12 and 13 are allowed and that claim 6 would be allowed if rewritten to include the limitations of its base claim. As set forth above, however, claim 1, from which claim 6 depends is not subject to rejection accordingly, claim 6 is in condition for allowance.

Appln. No.: 09/677,901
Amendment Dated February 20, 2004
Reply to Office Action of November 20, 2003

MATI-195US

In view of the foregoing amendments and remarks, Applicants request that the Examiner reconsider and withdraw the rejection of claims 1-5, 11 and 14-16 and the objection to claim 6.

Respectfully submitted,



Kenneth N. Nigon, Reg. No. 31,549
Attorney(s) for Applicant(s)

KNN/tmb

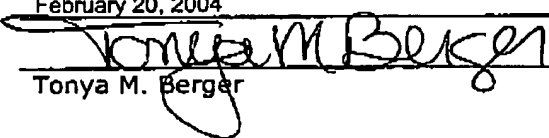
Dated: February 20, 2004

P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

The Commissioner for Patents is hereby authorized to charge payment to Deposit Account No. 18-0350 of any fees associated with this communication.

I hereby certify that this correspondence is being filed with the U.S. Patent and Trademark Office via Facsimile Transmission to Facsimile No. 1-703-872-9306 addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on:

February 20, 2004



Tonya M. Berger